CLAIMS

1.   A method for controlling a VoIP call, comprising:

tracking adaptation schemes used for transmitting packets in a Voice Over IP (VoIP) call;

monitoring a user response to the VoIP call; and

dynamically varying the adaptation schemes used for transmitting the packets according to the monitored user response.

2.   A method according to claim 1 including;

initially transmitting the packets in the VoIP call using a best effort transmission scheme;

monitoring the user response for a request to increase sound quality; and

requesting reservation of network resources during the already established VoIP call when the increase sound quality request is detected from the user response.

3.   A method according to claim 2 wherein requesting reservation of network resources comprises making an RSVP request during the VoIP call.

4.   A method according to claim 2 including conducting the already established VoIP call using reserved network resources when the requested reservation is accepted and the user response requests additional increases in the sound quality of the VoIP call.

5.   A method according to claim 4 including increasing voice coder performance or reducing payload size after the network resources are reserved.

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6.   A method according to claim 1 including using a signal generated by an input device to detect the user response during the VoIP call.

7.   A method according to claim 6 including using a dial or buttons on a

10   telephone as the input device.

8.   A method according to claim 6 including using a graphical user interface as the input device.

15   9.   A method according to claim 1 including decoding Dual Tone Multiple Frequency signals to detect the user response.

10.   A method according to claim 1 including monitoring congestion in a network used for conducting the VoIP call and varying the adaptation schemes according to the user

20   response and the monitored congestion.

11.   A method according to claim 1 wherein varying the adaptation schemes comprises varying codecs used for encoding audio signals into digital data making up the packets.

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12.   A method according to claim 1 including detecting a user response selecting a cost for the VoIP call and varying the adaptation schemes according to the selected cost.

13.   An adaptation system, comprising:

an input for detecting a user response to a call; and

a controller configured to dynamically vary adaptation parameters used for transmitting packets making up the call according to the user response detected by the input.

14.   An adaptation system according to claim 13 wherein the controller monitors congestion in the network carrying the call and selects which of the adaptation parameters to vary according to the monitored congestion.

15.   An adaptation system according to claim 13 wherein the controller initially transmits the packets in the call using a best effort transmission scheme and during the call requests reservation of network resources when the user response requests increased sound quality.

16.   An adaptation system according to claim 15 wherein the controller initiates an RSVP request to reserve the network resources.

17.   An adaptation system according to claim 15 wherein the controller monitors for acceptance of the network reservation request and modifies the adaptation parameters to provide an increased sound quality call when the acceptance is received.

18.   An adaptation system according to claim 13 wherein the input comprises a dial or buttons.

19. An adaptation system according to claim 13 wherein the input comprises a graphical user interface.

20. An adaptation system according to claim 19 including a cost icon in the graphical user interface that allows selection of a call cost, the controller varying the adaptation parameters according to the selected call cost.

21. An adaptation system according to claim 13 wherein the input device generates Dual Tone Multiple Frequency signals that are decoded by the controller for identifying the user response.

22. An adaptation system according to claim 13 wherein the user response determines how much the controller varies the adaptation parameters.

23. An adaptation system according to claim 13 wherein the controller varies a rate that the packets are transmitted and received during the call.

24. An electronic storage medium containing software used for controlling a VoIP call, the software in the electronic storage medium comprising:

code for tracking adaptation schemes used for transmitting audio packets in a Voice Over IP (VoIP) call;

code for monitoring a user response to the VoIP call; and

code for dynamically varying the adaptation schemes used for transmitting the audio packets according to the monitored user response.

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25.   An electronic storage medium according to claim 24 including;

code for initially transmitting the packets in the VoIP call using a best effort

transmission scheme;

code for monitoring the user response for a request to increase voice quality; and

10   code for requesting reservation of network resources during the already established

VoIP call when the increase voice quality request is detected from the user response.

26.   An electronic storage medium according to claim 25 including code that

requests reservation of network resources by making an RSVP request in the middle of the

15   VoIP call.

27.   An electronic storage medium according to claim 25 including code for

conducting the already established VoIP call using reserved network resources when the

requested reservation is accepted and the user response requests additional increases in voice

20   quality of the VoIP call.

28.   An electronic storage medium according to claim 27 including code for

increasing voice coder quality and reducing packet payload size for the packets in the VoIP

call after the network resources are reserved.

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29.   An electronic storage medium according to claim 24 including code that

detects the user response from a signal generated by an input device controllable by a user

during the VoIP call.

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30.   An electronic storage medium according to claim 29 wherein the input device comprises a dial on a telephone.

31.   An electronic storage medium according to claim 29 wherein the input device

10   comprises a graphical user interface on a computer.

32.   An electronic storage medium according to claim 24 including code that decodes Dual Tone Multiple Frequency signals to identify the user response.

15   33.   An electronic storage medium according to claim 24 including code for monitoring congestion in a network used for conducting the VoIP call and varying the adaptation schemes according to the user response and the monitored congestion.

34.   An electronic storage medium according to claim 24 including:

20   code for varying codecs used for encoding audio signals into digital data making up the audio packets;

          code for varying a rate that the audio packets are transmitted and received during the VoIP call;

          code for varying an amount of audio data in the audio packets; and

25   code for adding or removing error correction information from the audio packets.

35.   An electronic storage medium according to claim 24 including code for

detecting a user response selecting a cost for the VoIP call and varying the adaptation

schemes according to the selected cost.

36.   A system for controlling a VoIP call, comprising:

means for tracking adaptation schemes used for transmitting audio packets in a Voice

Over IP (VoIP) call;

means for monitoring a user response to the VoIP call; and

means for dynamically varying the adaptation schemes used for transmitting the audio

packets according to the monitored user response.

37.   A system according to claim 36 including;

means for initially transmitting the packets in the VoIP call using a best effort

transmission scheme;

means for monitoring the user response for a request to increase voice quality; and

means for requesting reservation of network resources during the already established

VoIP call when the increase voice quality request is detected from the user response.

38.   A system according to claim 37 including means for requesting reservation of

network resources by making an RSVP request in the middle of the VoIP call.

39.   A system according to claim 37 including means for conducting the already

established VoIP call using reserved network resources when the requested reservation is

accepted and the user response requests additional increases in voice quality of the VoIP call.

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40.   A system according to claim 38 including means for increasing voice coder quality and reducing packet payload size for the packets in the VoIP call after the network resources are reserved.

10   41.   A system according to claim 36 including means for detecting the user response from a signal generated by an input device controllable by the user during the VoIP call.

42.   A system according to claim 36 including means for detecting the user
15   response from a dial on a telephone.

43.   A system according to claim 36 including means for detecting the user response from a graphical user interface on a computer.

20   44.   A system according to claim 36 including means for decoding Dual Tone Multiple Frequency signals to monitor the user response.

45.   A system according to claim 36 including means for monitoring congestion in the network used for conducting the VoIP call and varying the adaptation schemes having a
25   best chance with the monitored congestion of adapting the VoIP call to the user response.

46.   A system according to claim 36 including:

5   means for varying codecs used for encoding audio signals into digital data making up

the audio packets;

means for varying a rate that the audio packets are transmitted and received during the

VoIP call;

means for varying an amount of audio data in the audio packets; and

10   means for adding or removing error correction information from the audio packets.

47.   A system according to claim 24 including means for detecting a user response

selecting a cost for the VoIP call and means for varying the adaptation schemes according to

the selected cost.